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mersion, July 21. 9 b. 42 17 11 at Cartagene was 14 b. 44 59 11 at Wansted; whence Wansted is 5 b. 2 142 11 more easterly than Cartagene: and taking the Medium of all three, 5 b. 2 134" or 75° 38' may be taken for the true difference of Longitude, that is, 75 ½ from London, which compared with Capt. Candler's Observation of the late Lunar Eclipse, shews Cartagene to be about 20 Leagues to the Eastwards of Port Royal in Jamaica.

III. Cometæ Berolini, anno 1718. visi Observationes a 18 Januarii, Stylo novo, ad 5 Febr. ex Epistolâ Viri Cl. Christfridi Kirchij, Reg. Soc. Scient. Berolin. Astron. ad Edm. Hallejum, LL.D. R. S. S. desumptæ.

Monere hic debeo observationes Cometæ à me inventi, in Novis Literariis Lipsiens. non esse accuratas; primo quidem, cum eas tantum amico cuidam festinanter transmiserim, ut etiam ille Cometam quæreret; deinde, cum etiam vitium typographicum irrepserit; nam die 23 Januarii mane, Cometa cum  $\theta & \varphi$  Cassiopeæ (non vero  $\delta & \varphi$ ) construebat triangulum æquicrurum; & vesperi  $\varphi$  Persei, Cometa &  $\theta$  Cassiopeæ ad sensum erant in linea recta. Pleniorem Cometæ historiam jam paratam habeo, ex qua hæc breviter attingam. Observavi eum a die 18  $\Im$ an. ad  $\Im$  Februarii. Loca ejus ex observationibus ad horam 10 vespertinam cujusque diei, quo Cometa observari potuit, reducta, hæc Tabella exhibet.

	Longitudo.			Latitudo.		
18 Jan.	27	26	ම	69	18	S.
21 Jan.	16	25	ර	48	42	S.
23 Jan.	9 5	28	් ර	39	45	S.
26 Jan.		25	් ර	32	55	S.
27 Jan.	4	4 I	გ	3 I	24	S.
28 Jan.		4	გ	30	13	S.
30 Jan.	3 2	4	g	28	23	\$.
31 Jan.		43	g	27	40	\$.
1 Febr. 2 Febr.	2 2	25 10	გ გ	27 26	I 22	S.
5 Febr.	1	39	૪	24	53	S.

Via eius transiit supra tergum Ursæ minoris, prope Polarem, per crura & genua Cephei, Cassiopeæ & An-Nodus ejus descendens fuit in 21 gradu Arietis, cum aliqua mutatione: Angulus orbitæ cometicæ & Eclipticæ 69 1 grad. circiter, etiam cum aliqua variatione. Via Cometæ 2 fere gr. à Polo mundi transiit, & Æquatorem secavit in 20 ½ gr. à puncto æquino-Ctiali. Perigæum Cometæ fuit in 6° 61 m. cum latitudine septentrionali 62° 7'. Cometa in Perigæo fuit, D. 18 Jan. hor. 3. min. 9. mane. Motus Cometæ diurnus in orbita propria, in Perigæo (12 scilicet horis ante, & 12 post Perigæum) 22°8′; ultimis vero diebus apparitionis Supposita Terra quiescente, & Cometa in recta linea trajiciente, motus Cometæ fuit 391 partium, qualium distantia minima Cometæ à Terra 1000. De Parallaxi Cometæ nihil certi affirmare possum, nisi quod multum fupra Lunam fuerit elevatus Cometa. Probabiliter vero conjicio, illum intra Planetarum orbes exstitisse, imo in Perigæo multo propiorem nobis fuisse Martis

Martis Sphærå. Sit enim semidiameter orbitæ Terræ 10000 partium, erit ita motus diurnus Martis 139 vel 140. Si vero Cometam in orbita Martis exstitisse suppono, cum latitudine 62° 7' & motu diurno 22° 8', ejus velocitas esset 2847 partium, si scilicet simul fuisset in oppositione Solis; cum autem differentia Longitudinis Solis & Cometæ in Perigæo tantum fuerit 141° 40', motus diurnus Cometæ evadit 3200 part. & proportio motus Cometæ ad motum Martis ut 23 ad 1. Quare colligo Cometam intra sphæram Martis exstitisse. Si vero quis Cometam ad Saturni orbitam evehere vellet, deberet ipsi velocitatem tribuere, quæ esset ad velocitatem Saturni ut 600 ad 1; & quod uno die majus spatium percurrisset, quam Terra dimidio anno absolvere soleat. Ne dicam de diametro Cometæ, quæ non multo minor existere debuisset tribus diametris Solis.

Comparationem institui hujus Cometæ cum aliis, & invenio Cometam, quem Regiomoutanus anno 1472 vel 1475. mense Jan. & Febr. observavit, viam tenuisse non multo diversam à via nostri Cometæ; transiit enim per Ursam minorem & Cephei semora, per pectus vel collum Caffiopeæ & cingulum Andromedæ; ac velocitas ejus maxima uno die fuit 40 grad. Anno 1556, alius Cometa est observatus, cujus Nodos Camerarius in 11º ≤ & γ ponit, & qui prope pedes Ursæ minoris, per Cepheum, supra Cassiopeain, & per partes superiores Andromedæ transiit, motu valde veloci in Perigæo. Quod si Regiomontanus Cometam anno 1475 observavit, (de quo tamen Astronomi valde dubitant) admirabilis esset convenientia inter hosce tres Cometas: intervallum enim prioris à medio esset 81 annorum, & à medio Cometà ad ultimum 162 ann. ut ita revolutio Cometæ posset esset 81 annorum; nec etiam Historia aliorum Cometarum hisce male responderet.